

II. AMENDMENT TO THE CLAIMS

1. (Previously Presented) A structure of optically effective diffraction security elements with a metallic reflection layer, comprising a target oriented electric code of data by additionally applied beam, grid, bow and/or circularly shaped electrically conductive structures with steep edges towards adjacent non-metallized structures in different planes, a line thickness of the smallest electrically conductive structure which may be examined being less than or equal to 5 mm and non-zero.

2. (Previously Presented) The structure of security elements of claim 1, allowing examination of security elements, further comprising a target-oriented electric code of data by additionally applied beam, grid, bow and/or circularly shaped metallized structures with steep edges towards adjacent non-metallized structures in different planes, a line width of the smallest metallized structure which may be examined being less than or equal to 5 mm, but non-zero.

3. (Previously Presented) The structure of security elements of claim 1, wherein said different electrically conductive structures possess different electric conductivities.

4. (Previously Presented) The structure of security elements of claim 1, wherein at least two structures within a security element possess different application thicknesses.

5. (Previously Presented) The structure of security elements of claim 1, wherein a width of an electrically conductive layer of constant electric conductivity corresponds to a width of at least two electrodes of an examination apparatus.

6. (Previously Presented) The structure of security elements of claim 1, wherein a distance between two electrically conductive structures of a same and/or different electric conductivity is at least 0.1 mm.

7. (Previously Presented) The structure of security elements of claim 1, wherein said additionally applied electrically conductive structures are inks or dyes.

8. (Previously Presented) An apparatus for capacitive examination of documents with optically effective diffraction security elements with a metallic reflection layer, wherein a capacitively operating scanner a width of which is larger than a largest width of a document examines electrically conductive structures arranged within metallized security elements by means of a plurality of transmitting electrodes arranged in one or more rows in side by side relationship and with a receiving electrode extending along the transmitting electrodes on a same side as the document to be examined and evaluates the structures by electronic energizing and evaluation circuits arranged in the scanner for comparing a signal pattern of the document to be examined with corresponding reference signal patterns .

9. (Previously Presented) The apparatus of claim 8, wherein at least two adjacent electrodes are arranged electrically connected.

10. (Previously Presented) The apparatus of claim 9, wherein said electronic energizing circuit consists of a current source, a multiplexer, an oscillator for providing energy for the transmitting electrodes and an oscillator for energizing the multiplexer.

11. (Previously Presented) The apparatus of claim 8 wherein the electronic evaluation circuit consists of a current source, an amplifier, a demodulator, a comparator, a micro-processor with memory as well as filters for a suppression of extraneous and interference signals.

12. (Previously Presented) The apparatus of claim 8 wherein the smallest distance between two transmitting electrodes is smaller than 5 mm, and non-zero.

13. (Previously Presented) The apparatus of claim 8 wherein a distance

between a transmitting electrode and the receiving electrode is at least 5 mm.

14. (Previously Presented) The apparatus of claim 8 wherein the apparatus is provided with a biasing device which guides the document to be examined parallel to the transmitting and receiving electrodes, biased against the scanner.

15. (Previously Presented) The apparatus of claim 8 wherein shafts of the document transport rollers are connected to a mass by sliding contacts.

16. (Previously Presented) The apparatus of claim 8 wherein the apparatus is arranged in high speed document processing machines .

17. (Previously Presented) The apparatus of claim 8 wherein the apparatus is arranged in a manual apparatus.

18. (Canceled)